

Form PTO-1449 Modified

Docket No.
PUAS-0016Serial No.
09/982,001Applicant
Stephen R. Forrest, et al.Filing Date
October 18, 2001Group
2874U.S. Department of Commerce
Patent and Trademark Office
List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)U.S. Department of Commerce
Patent and Trademark Office

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
Aullah	27	5,917,967	06/29/99	Dubey, et al.	385	14
	28	6,051,445	04/18/00	Dubey, et al.	438	31
	29	US 6,310,995 B1	10/230/01	Saini, et al.	385	28
	30	US 6,311,003 B1	10/30/01	Dubey, et al.	385	130
	31	US 6,314,117 B1	11/06/01	Heim et al. Landsman, et al.	709	203
	32	US 6,339,496 B1	01/15/02	Koley, et al.	359	344

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO

EXAMINER

Akm E. Ullah

DATE CONSIDERED

10/29/02

Form PTO-1449 Modified

Docket No.
PUAS-0016Serial No.
09/982,001List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)Applicant
Stephen R. Forrest, et al.U.S. Department of Commerce
Patent and Trademark OfficeFiling Date
October 18, 2001Group
2874

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Aullah	23	Dagenais, M., et al., "Alignment tolerant lasers and silicon waferboard integration," <i>Passive Alignment Techniques for Optoelectronic Transmitter Arrays</i> , http://www.ee.umd.edu/photonics/papers/spie/spie97.htm , 1997, 6 pages	No mon
	24	Dagenais, M., et al., "complex needs drive optoelectronic integration," <i>Optoelectronics World</i> , July 1998, 157-160	
	25	Saini, S.S., et al., "Compact mode expanded lasers using resonant coupling between a 1.55- μ m InGaAsP tapered active region and an underlying coupling waveguide," <i>IEEE Photonics Technology Letters</i> , September 1998, 10(9), 3 pages	
	26	Vusirikala, V., et al., "1.55- μ m InGaAsP-InP laser arrays with integrated-mode expanders fabricated using a single epitaxial growth," <i>IEEE J. Selected Topics in Quantum Electronics</i> , December 1997, 3(6), 1332-1343	

EXAMINER

Akm E. uallah

DATE CONSIDERED

10/29/02

**Form PTO-1449 Modified**

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
PUAS-0016

Application No.
09/982,001

Applicant
Stephen R. Forrest

Filing Date
October 18, 2001

Group
2874

Confirmation No.
8094

RECEIVED
NOV 12 2004
TECH CENTER 2800

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Aullab ↓	33	Copy of the Supplementary European Search Report dated February 6, 2004 (EP 01 93 5136)
	34	Bauer, J.G., et al., "High responsivity integrated tapered waveguide PIN photodiode," <i>Proceedings for the European Conference on Optical Communication (ECOC)</i> , September 12-16, 1993, Vol. 2, Conf. 19, 277-280
	35	Saini, S.S., et al., "Compact low-loss vertical resonant mode coupling between two well-confined waveguides," <i>Electronics Letts.</i> , 1999, 35(14), 2 pages
	36	Saini, S.S., et al., "Passive active resonant coupler (PARC) platform with mode expander," <i>IEEE Photonics Techn. Letts.</i> , 2000, 12(8), 1025-1027

NO mention
NO mention

EXAMINER Akm E. Ullah

DATE CONSIDERED June 01/2004



Paper # 19

Sheet 2 of 2

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. PUAS-0016	Application No. 09/982,001
	Applicant Stephen R. Forrest	
	Filing Date October 18, 2001	Group 2874
	Confirmation No. 8094	

RECEIVED
NOV 12 2004
TECH CENTER 2800**U. S. PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Name	Class	Subclass
Aullah	37	5,078,516	01/07/92	Kapon, et al.	385	129

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
Aullah	38	2 105 863 A	03/30/83	Great Britain		

EXAMINER <i>Akm Enayet Ullah</i>	DATE CONSIDERED <i>June 01/2004</i>
----------------------------------	-------------------------------------

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. PUAS-0016/ 98-152-2-1	Application No. 09/982,001
		Applicant Stephen R. Forrest, et al.	
		Filing Date October 18, 2001	Group 2874
		Confirmation No. 8094	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
KSW	40	Alferness, R.C., et al., "Vertically coupled INGAASP/INP buried rib waveguide filter," <i>Applied Physics Letts.</i> , 1991, 59(20), 2573-2575 <i>November 1991</i>	
KSW	41	Bach, L., et al., "Wavelength stabilized single-mode lasers by coupled micro-square resonators," <i>IEEE Photonics Techn. Letts.</i> , 2003, 15, 377-379 <i>March 2003</i>	
KSW	42	Bennett, S., et al., "1.8-THz bandwidth, zero-frequency error, tunable optical comb generator for DWDM applications," <i>IEEE Photonics Techn. Letts.</i> , 1999, 11(5), 551-553 <i>May 1999</i>	
KSW	43	Bruckner, H.J., et al., "Taper-Waveguide integration for polarization insensitive InP/InGaAsP based optical amplifiers," <i>Electron. Lett.</i> , 1994, 30(16), 1290-1291 <i>August 1994</i>	
KSW	44	Claasen, A., et al., "Comparison of diodes and resistors for measuring chip temperature during thermal characterization of electronic packages using thermal test chips," <i>IEEE 13th Ann. Semiconductor Thermal Measurement & Management Symposium</i> , 1997, 198-209 <i>No Month</i>	
KSW	45	"Coupled cavity modelocked lasers," <i>Applied Physics</i> , http://fb6www.uni-paderborn.de , downloaded March 30, 2005, 3 pages	
KSW	46	"Current work on composite-resonator vertical-cavity lasers," <i>Coupled Cavity VCSELs</i> , http://vcsel.micro.uiuc.edu , downloaded March 30, 2005, 4 pages	
KSW	47	den Besten, J.H., et al., "An integrated coupled-cavity 16-wavelength digitally tunable laser," <i>IPR</i> , 2002, 1-3 <i>No Month</i>	
KSW	48	Forrest, S.R., et al., "Integrated photonics using asymmetric twin-waveguide structures," <i>IEEE</i> , 2000, 13-16 <i>No Month</i>	
KSW	49	Fredkin, E., et al., "Conservative Logic," <i>Int. J. Theor. Phys.</i> , 1982, 21(3/4), 219-253 <i>No Month</i>	
EXAMINER		/Kevin Wood/	DATE CONSIDERED 01/16/2007

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. PUAS-0016/ 98-152-2-1	Application No. 09/982,001
		Applicant Stephen R. Forrest, et al.	
		Filing Date October 18, 2001	Group 2874
		Confirmation No. 8094	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
KSW	50	Gokhale, M.R., et al., "Uncooled, 10Gb/s 1310 nm electroabsorption modulated laser," presented at OFC 2003 (PD-42), Atlanta, USA, 2003, 4 pages <i>No Month</i>	
KSW	51	Hamamoto, et al., "Insertion-loss-free 2x2 InGaAsP/InP optical switch fabricated using bandgap energy controlled selective MOVPE," <i>Electron. Lett.</i> , 1995, 31(20), 1779-1781 <i>No Month</i>	
KSW	52	Hammond, B., et al., "Integrated wavelength locker for turnable laser applications," 15 th Ann. Meeting of the IEEE Lasers & Electro-Optics Soc., 2002, 2, 479-480 <i>No Month</i>	
KSW	53	He, J.-J., et al., "Photonic integrated circuits and components using quantum well intermixing," <i>Integrated Optoelectronics, Proc. of SPIE</i> , 1996, 2891, 2-9 <i>November 1996</i>	
KSW	54	Johnson, J.E., et al., "Fully stabilized electroabsorption-modulated tunable DBR laser transmitter for long-haul optical communications," <i>IEEE J. on Selected Topics in Quantum Electronics</i> , 2001, 7, 168-177 <i>March 2001</i>	
KSW	55	Kanjamala, A.P., et al., "Wavelength switching in multicavity lasers," <i>Am. Inst. Of Physics</i> , 1997, 71(3), 300-302 <i>March 1997</i>	
KSW	56	Newkirk, M.A., et al., "1.55 μ m multiquantum well semiconductor optical amplifier with low gain ripple and high coupling efficiency for photonic circuit integration," <i>Electron. Lett.</i> , 1993, 29(5), 443-444 <i>No Month</i>	
KSW	57	O'Dowd, R., et al., "Frequency plan and wavelength switching limits for widely tunable semiconductor transmitters," <i>IEEE J. Selected Topics in Quantum Electronics</i> , 2001, 7, 259-269 <i>March 2001</i>	
KSW	58	Oh, K.R., et al., "2x2InGaAsP/InP laser amplifier gate switch arrays using reactive ion etching," <i>Electron. Lett.</i> , 1996, 32(1), 39-40 <i>November 1995</i>	
KSW	59	Rabus, D.G., et al., "MMI-coupled ring resonators in GaInAsP-InP," <i>IEEE Photonics Techn. Letts.</i> , 2001, 13, 812-814 <i>August 2001</i>	
KSW	60	Rabus, D.G., et al., "Resonance frequency tuning of a double ring resonator in GaInAsP/InP: Experiment and simulation," <i>Jpn. J. Appl. Phys.</i> , 2002, 41, 1186-1189 <i>October 2001</i>	
EXAMINER		/Kevin Wood/	DATE CONSIDERED 01/16/2007

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. PUAS-0016/ 98-152-2-1	Application No. 09/982,001
		Applicant Stephen R. Forrest, et al.	
		Filing Date October 18, 2001	Group 2874
		Confirmation No. 8094	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
KSW	61	Rabus, D.G., et al., "High-Q channel-dropping filters using ring resonators with integrated SOAs," <i>IEEE Photonics Techn. Letts.</i> , 2002, 1, 1442-1444 <i>October 2002</i>	
KSW	62	Saini, S.S., et al., "Compact mode expanded lasers using resonant coupling between a 1.55 μ m InGaAsP tapered active region and an underlying coupling waveguide," <i>IEEE Photonics Technology Letters</i> , September 1998, 10(9), 1232-1234 <i>September 1998</i>	
KSW	63	Sarlet, G., et al., "Control of widely tunable SSG-DBR lasers for dense wavelength division multiplexing," <i>IEEE J. Lightwave Techn.</i> , 2000, 18, 1128-1138 <i>August 2000</i>	
KSW	64	Shi, H., et al., "Relative intensity noise measurements of a widely tunable sampled-grating DBR laser," <i>IEEE Photonics Techn. Letts.</i> , 2002, 14, 759-761 <i>June 2002</i>	
KSW	65	Silva, C.F.C., et al., "A dense WDM source using optical frequency comb generation and widely tunable injection-locked laser filtering techniques," Department of Electrical Engineering, year not available, 4 pages <i>No Date</i>	
KSW	66	Studenkov, P.V., et al., "Monolithic integration of an all-optical Mach-Zehnder demultiplexer using an asymmetric twin-waveguide structure," <i>IEEE Photonics Techn. Lett.</i> , 2001, 13, 600-602 <i>June 2001</i>	
KSW	67	Suematsu, Y., et al., "Integrated twin-guide AlGaAs laser with multiheterostructure," <i>IEEE J. Quantum Electron.</i> , 1973, QE-11(7), 457-460 <i>No Month</i>	
KSW	68	Tatsuno, K., et al., "50 GHz spacing, multi-wavelength tunable locker integrated in a transmitter module with a monolithic-modulator and a DFB-laser," <i>Optical Fiber Commun. Conf.</i> , 2001, TuB5-1 - TuB5-4 <i>No Month</i>	
KSW	69	Tauke-Pedretti, A., et al., "High saturation power and high gain integrated photoreceivers," <i>IEEE Photonics Technology Letts.</i> , 2005, 17(10), 2167-2169 <i>October 2005</i>	
KSW	70	Utaka, K., et al., "Measurement of coupling coefficient and coupling length of GaAs/AlGaAs integrated twin-guide injection lasers prepared by liquid-phase epitaxy," <i>Trans. IECE Japan</i> , 1979, E-62, 319-323 <i>May 1979</i>	
KSW	71	Van, V., et al., "Optical signal processing using nonlinear semiconductor microring resonators," <i>IEEE J. on Selected Topics in Quantum Electronics</i> , 2002, 8, 705-713 <i>May 2002</i>	
KSW	72	Vusirikala, V., et al., "Compact mode expanders using resonant coupling between a tapered active region and an underlying coupling waveguide," <i>IEEE Photonics Techn. Letts.</i> , 1998, 10(2), 203-205 <i>February 1998</i>	
EXAMINER		/Kevin Wood/	DATE CONSIDERED 01/16/2007

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. PUAS-0016/ 98-152-2-1	Application No. 09/982,001
		Applicant Stephen R. Forrest, et al.	
		Filing Date October 18, 2001	Group 2874
		Confirmation No. 8094	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
KSW	73	Wang, H., et al., "A fully integratable, 1.55- μ m wavelength, continuously tunable asymmetric twin-waveguide distributed bragg reflector laser," <i>IEEE Photonics Techn. Lett.</i> , 2003, 118-1191 <i>September 2003</i>	
KSW	74	Wei, J., et al., "A high-responsivity high-bandwidth asymmetric twin-waveguide coupled InGaAs-InP-InAlAs avalanche photodiode," <i>IEEE Photonics Techn. Lett.</i> , 2002, 14, 1590-1592 <i>November 2002</i>	
KSW	75	Woodward, S.L., et al., "RIN in multisection MQW-DBR lasers," <i>IEEE Photonics Technology Letts.</i> , 1990, 2, 104-108 <i>February 1990</i>	
KSW	76	Woodward, S.L., et al., "A control loop which ensures high side-mode-suppression ratio in a tunable DBR laser," <i>IEEE Photonics Techn. Letts.</i> , 1992, 4, 417-419 <i>May 1992</i>	
KSW	77	Xia, F.N., et al., "Monolithic integration of a semiconductor optical amplifier and a high bandwidth p-i-n photodiode using asymmetric twin-waveguide technology," <i>IEEE Photonics Techn. Lett.</i> , 2003, 15, 452-454 <i>March 2003</i>	
KSW	78	Xu, L., et al., "Monolithic integration of an InGaAs ^I -InP MQW laser/waveguide using a twin-guide structure with a mode selection layer," <i>IEEE Photon. Technol. Lett.</i> , 1997, 9, 569-571 <i>May 1997</i>	
KSW	79	Yakoyama, Y., et al., "Multiwavelength locker integrated wide-band wavelength-selectable light source module," <i>IEEE Photonics Technology Letts.</i> , 2003, 15, 290-292 <i>February 2003</i>	
EXAMINER		/Kevin Wood/	DATE CONSIDERED 01/16/2007

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office				Docket No. PUAS-0016/ 98-152-2-1		Application No. 09/982,001	
				Applicant Stephen R. Forrest, et al.			
				Filing Date October 18, 2001		Group 2874	
				Confirmation No. 8094			
U. S. PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Name	Class	Subclass	
KSW	80	5,500,867	03/19/96	Krasulick	372	38.02	
KSW	81	5,574,742	11/12/96	Ben-Michael, et al.	372	45	
KSW	82	5,715,268	02/03/98	Lang, et al.	372	50	
KSW	83	6,215,295 B1	04/10/01	Smith, III	324	95	
KSW	84	6,246,965	06/12/01	Cockerham, et al.	702	85	
KSW	85	6,031,851	02/29/00	Shimizu, et al.	372	18	
KSW	86	6,330,378	12/11/01	Forrest, et al.	385	14	
KSW	87	6,330,387 B1	12/11/01	Salamon, et al.	385	129	
KSW	88	6,483,863 B2	11/19/02	Forrest, et al.	372	50	
KSW	89	6,519,374	02/11/03	Stook, et al.	385	2	
KSW	90	6,795,622 B2	09/21/04	Forrest, et al.	385	50	
KSW	91	6,819,814 B2	11/16/04	Forrest, et al.	385	14	
KSW	92	2002-0031297 A1	03/14/02	Forrest, et al.	385	28	
KSW	93	2002-0097941 A1	07/25/02	Forrest, et al.	385	1	
KSW	94	2003-0012244 A1	01/16/03	Krasulick, et al.	372	50	
KSW	95	2004-0096175 A1	05/20/04	Tolstikhin	385	131	
EXAMINER /Kevin Wood/ DATE CONSIDERED 01/16/2007							

© 2005 WW

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. PUAS-0016/ 98-152-2-1	Application No. 09/982,001
	Applicant Stephen R. Forrest, et al.	
	Filing Date October 18, 2001	Group 2874
	Confirmation No. 8094	

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
KSW	96	WO 03/007057 A3	01/23/03	PCT		
KSW	97	WO 03/102678 A1	12/11/03	PCT		
KSW	98	0 263 640 B1	01/07/93	EP		
KSW	99	2 337 449	07/29/77	FR	X (p. 1-5)	
EXAMINER /Kevin Wood/				DATE CONSIDERED 01/16/2007		

© 2005 WW



Sheet 1 of 1

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. PUAS-0016/06020808	Application No. 09/982,001
		Applicant Stephen R. Forrest, et al.	
		Filing Date October 18, 2001	Group 2874
		Confirmation No. 8094	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
<i>KSW</i>	103	Huang, Y., et al., "Reduction of absorption loss in asymmetric twin waveguide laser tapers using argon plasma-enhanced quantum-well intermixing," <i>IEEE Photonics Techn. Letts.</i> , 2004, 16(10), 2221-2223 (<i>No Month</i>)	
EXAMINER		<i>Kura & Wood</i>	
		DATE CONSIDERED <i>1/6/07</i>	